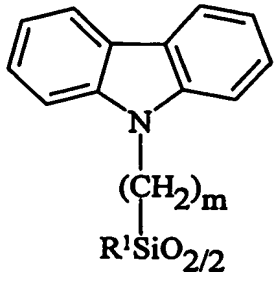
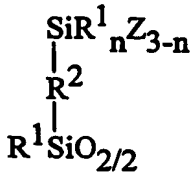
That which is claimed is:

1. A carbazolyl-functional linear polysiloxane comprising from 30 to 99 mol% of units having the formula I, from 1 to 70 mol% of units having the formula II, and units having the formula III:



(I)



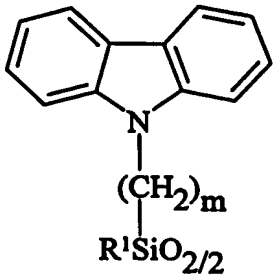
(II) $R^4R^1{}_2SiO_{1/2}$ (III),

wherein R^1 is C_1 to C_{10} hydrocarbyl free of aliphatic unsaturation; R^2 is $-CH_2-CHR^3-$ or $-CH_2-CHR^3-Y-$, wherein Y is a divalent organic group and R^3 is R^1 or -H; R^4 is R^1, $-(CH_2)_m-Cz$, $-CH_2-CHR^3-SiR^1{}_nZ_{3-n}$, or $-CH_2-CHR^3-Y-SiR^1{}_nZ_{3-n}$, wherein Cz is N-carbazolyl; Z is a hydrolysable group; m is an integer from 2 to 10; and n is 0, 1, or 2.

2. The carbazolyl-functional linear polysiloxane according to claim 1, wherein the polysiloxane comprises from 75 to 99 mol% of units having the formula (I) and from 5 to 50 mol% of units having the formula (II).

3. The carbazolyl-functional linear polysiloxane according to claim 1, wherein the polysiloxane contains up to 15 mol% of siloxane units having formulae selected from $R^1HSiO_{2/2}$, $HR^1{}_2SiO_{1/2}$, $R^1{}_2SiO_{2/2}$., and combinations thereof, wherein R^1 is C_1 to C_{10} hydrocarbyl free of aliphatic unsaturation.

4. A carbazolyl-functional linear polysiloxane comprising at least 30 mol% of units having the formula I and units having the formula IV:



(I) $Z_{3-p}R^1{}_pSiO_{1/2}$ (IV),

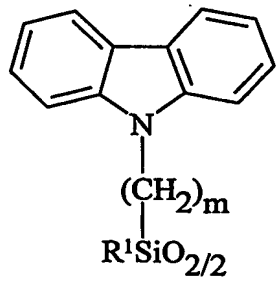
wherein R^1 is C_1 to C_{10} hydrocarbyl free of aliphatic unsaturation; Z is a hydrolysable group; m is an integer from 2 to 10; and p is 0, 1, or 2.

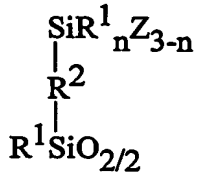
5. The carbazolyl-functional linear polysiloxane according to claim 4, wherein the polysiloxane contains at least 70 mol% of units having formula I.

6. The carbazolyl-functional linear polysiloxane according to claim 4, wherein the polysilxoane contains up to 15 mol% of siloxane units having formulae selected from $R^1HSiO_{2/2}$, $HR^1{}_2SiO_{1/2}$, $R^1{}_2SiO_{2/2}$., and combinations thereof, wherein R^1 is C_1 to C_{10} hydrocarbyl free of aliphatic unsaturation.

7. A silicone composition comprising:

(A) a polysiloxane selected from (i) at least one carbazolyl-functional linear polysiloxane comprising from 30 to 99 mol% of units having the formula I, from 1 to 70 mol% of units having the formula II, and units having the formula III:

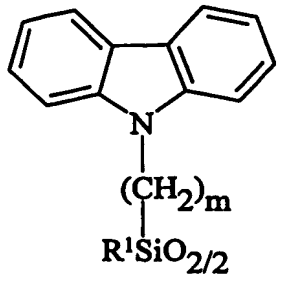




(I) (II) $R^4R^1{}_2SiO_{1/2}$ (III),

wherein R^1 is C_1 to C_{10} hydrocarbyl free of aliphatic unsaturation, R^2 is $-CH_2-CHR^3-$ or $-CH_2-CHR^3-Y-$, wherein Y is a divalent organic group and R^3 is R^1 or -H, R^4 is R^1, $-(CH_2)_m-Cz$, $-CH_2-CHR^3-SiR^1{}_nZ_{3-n}$, or $-CH_2-CHR^3-Y-SiR^1{}_nZ_{3-n}$, wherein Cz is N-

carbazolyl, Z is a hydrolysable group, m is an integer from 2 to 10, and n is 0, 1, or 2, and (ii) at least one carbazolyl-functional linear polysiloxane comprising at least 30 mol% of units having the formula I and units having the formula IV:



(I) $Z_{3-p}R^1{}_pSiO_{1/2}$ (IV),

wherein R^1 is C_1 to C_{10} hydrocarbyl free of aliphatic unsaturation, Z is a hydrolysable group, m is an integer from 2 to 10, and p is 0, 1, or 2, and (iii) a mixture comprising (i) and (ii); and

(B) an organic solvent.

8. The silicone composition according to claim 7, wherein the polysilxoane (A) is (A)(ii) wherein p has a value of 2, and further comprising a cross-linking agent having the formula $R^5{}_qSiZ_{4-q}$, wherein R^5 is C_1 to C_8 hydrocarbyl or halogen-substituted hydrocarbyl, Z is a hydrolysable group, and q is 0 or 1.

9. An organic light-emitting diode comprising:

a substrate having a first opposing surface and a second opposing surface;

a first electrode layer overlying the first opposing surface;

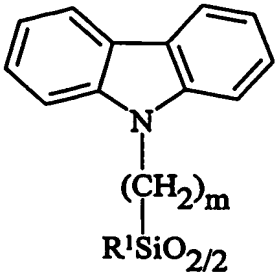
a light-emitting element overlying the first electrode layer, the light emitting element comprising

a hole-transport layer and

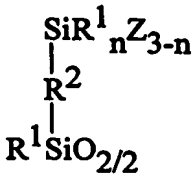
an electron-transport layer, wherein the hole-transport layer and the electron-transport layer lie directly on one another, and one of the hole-transport layer and the electron-transport layer comprises a carbazolyl-functional polysiloxane selected from

a cured carbazolyl-functional polysiloxane prepared by curing a silicone composition comprising (A) a polysiloxane selected from (i) at least one carbazolyl-functional linear polysiloxane comprising from 30 to 99 mol% of units having the

formula I, from 1 to 70 mol% of units having the formula II, and units having the formula III:

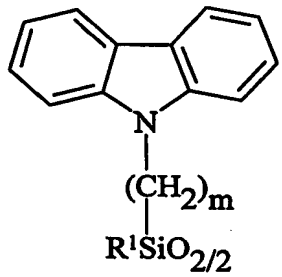


(I)



(II) $R^4R^1{}_2SiO_{1/2}$ (III),

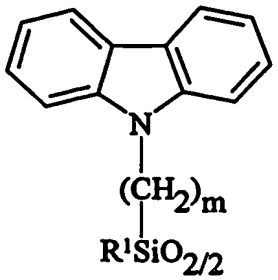
wherein R^1 is C_1 to C_{10} hydrocarbyl free of aliphatic unsaturation, R^2 is $-CH_2-CHR^3-$ or $-CH_2-CHR^3-Y-$, wherein Y is a divalent organic group and R^3 is R^1 or -H, R^4 is R^1, $-(CH_2)_m-Cz$, $-CH_2-CHR^3-SiR^1{}_nZ_{3-n}$, or $-CH_2-CHR^3-Y-SiR^1{}_nZ_{3-n}$, wherein Cz is N-carbazolyl, Z is a hydrolysable group, m is an integer from 2 to 10, nd n is 0, 1, or 2, (ii) at least one carbazolyl-functional linear polysiloxane comprising at least 30 mol% of units having the formula I and units having the formula IV:



(I) $Z_{3-p}R^1{}_pSiO_{1/2}$ (IV),

wherein R^1 is C_1 to C_{10} hydrocarbyl free of aliphatic unsaturation, Z is a hydrolysable group, m is an integer from 2 to 10, and p is 0, 1, or 2, and (iii) a mixture comprising (i) and (ii), and (B) an organic solvent, and

at least one carbazolyl-functional linear polysiloxane comprising at least 50 mol% of units having the formula I, and units having the formula V:



(I) $R^6R^1{}_2SiO_{1/2}$ (V),

wherein R^1 is C_1 to C_{10} hydrocarbyl free of aliphatic unsaturation, m is from 2 to 10, and R^6 is R^1 or $-(CH_2)_m$-Cz, wherein Cz is N-carbazolyl; and

a second electrode layer overlying the light-emitting element.

10. The organic light-emitting diode according to claim 9, wherein the hole-transport layer is a carbazolyl-functional polysiloxane.

11. The organic light-emitting diode according to claim 9, wherein the electron-transport layer is a carbazolyl-functional polysiloxane.